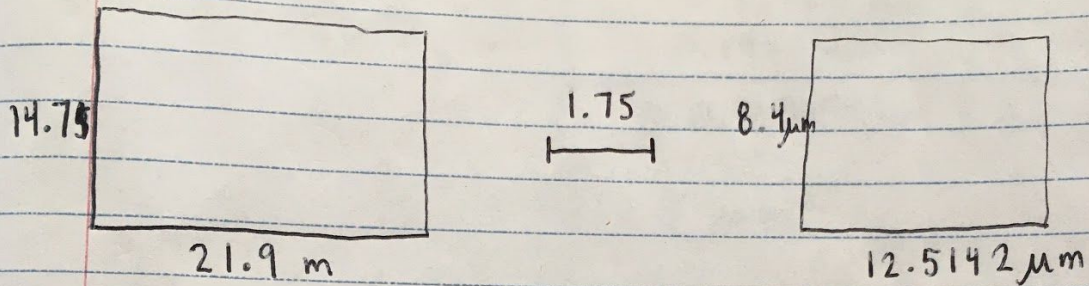


• area density
- 165 an hour



Area captured in image: $8.4 \times 12.5142 = 105.119 \mu\text{m}^2$
every 10 dots, do a dash: ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~

~~||||~~ ~~||||~~ ~~||||~~ || (42)

420 dots total

assumption, bead area πr^2

| Bead # | Bead diameters | Bead radius | Bead area |
|--------|-----------------------------|--------------------------------|-------------------------|
| 1 | 0.285 μm | 0.1428 μm | |
| 2 | 0.24 μm | 0.12 μm | |
| 3 | 0.34857 μm | 0.17428 μm | |
| 4 | 0.25714 μm | 0.12857 μm | |
| 5 | 0.21714 μm | 0.10857 μm | |
| 6 | 0.2342 μm | 0.11714 μm | |
| 7 | 0.13714 μm | 0.06857 μm | |
| 8 | 0.17714 μm | 0.08857 μm | |
| 9 | 0.245714 μm | 0.12285 μm | |
| 10 | 0.10857 μm | 0.05428 μm | |
| 11 | 0.1714 μm | 0.0857 μm | |
| 12 | 0.27428 μm | 0.13714 μm | |
| 13 | 0.3542 μm | 0.17714 μm | |
| 14 | 0.085714 μm | 0.04285 μm | |
| 15 | 0.38857 μm | 0.1942 μm | |
| Avg. | $\approx 0.233 \mu\text{m}$ | $\approx 0.114654 \mu\text{m}$ | 0.04129 μm^2 |

assume bead area $\pi r^2 = 0.04129 \mu\text{m}^2$

of beads : approximately 420 beads

beads \times bead area = $17.3418 \mu\text{m}^2$

$$\text{density} = \frac{\text{bead area}}{\text{total area}} = \frac{17.3418 \mu\text{m}^2}{105.119 \mu\text{m}^2} = 0.16497$$

Beads take up 16.497 % of surface

Distribution is not even, variable